

**Amendments to the Claims:**

This listing of claims will replace all prior versions, and listings, of claims in the application:

**Listing of Claims:**

- 1           1. (Currently amended): An accounting system comprising:
  - 2           a plurality of host computers;
  - 3           an accounting server in data communication with said host computers;
  - 4           a storage control device having a plurality of channel ports for receiving data
  - 5       input/output operations from said host computers, said storage control device in data
  - 6       communication with said accounting server;
  - 7           storage devices operative with said storage control device to store data received
  - 8       from said host computers and to retrieve data for transmission to said host computers;
  - 9           accounting data generating means for generating accounting data based on at least
  - 10      a number of times of access or a data transfer quantity for each of one or more accounting
  - 11      subject control units; and
  - 12           transfer means for informing said accounting server of said accounting data
  - 13       generated by said accounting data generating means,
  - 14           wherein for each said accounting subject control unit, accounting data is
  - 15      generated using metered accounting if an upper limit value for either the number of accesses per
  - 16      unit of time or for the quantity of data transferred per unit of time is not set, or fixed accounting,
  - 17      depending on whether an upper limit is defined for either a number of accesses per unit time or a
  - 18      quantity of data transferred per unit of time
  - 19           wherein for each said accounting subject control unit, if said upper limit value is
  - 20      set, then accounting data is generated using fixed accounting when said upper limit value has not
  - 21      been exceeded.

22               wherein for each said accounting subject control unit, if said upper limit value is  
23       set and an access limit for the number of accesses is not set, then accounting data is generated  
24       using metered accounting when that upper limit value has been exceeded,

25               wherein for each said accounting subject control unit, if said upper limit value is  
26       set and said access limit is set, then accounting data is generated using fixed accounting.

1               2. (Previously presented): An accounting system according to Claim 1,  
2       wherein an accounting subject control units is one of a host computer, a World Wide Name, a  
3       channel port, a storage device, or an in-storage-device area.

1               3. (Original): An accounting system according to Claim 1, wherein said  
2       storage control device is associated with a service processor and includes transfer means for  
3       informing said service processor of said accounting data.

1               4. (Previously presented): An accounting system according to Claim 3,  
2       further comprising:

3               means for setting said upper limit value of said accounting data in said accounting  
4       subject control units, said means being made to operate from at least one of said accounting  
5       server or said service processor.

1               5. (Previously presented): An accounting system according to Claim 4,  
2       wherein said upper limit value is determined on the basis of a predetermined period which  
3       includes, as a unit, at least one of a day, a week, a month, or a year.

1               6. (Previously presented): An accounting system according to Claim 4,  
2       wherein said storage control device includes means which operates so that when said upper limit  
3       value is set, said means does not process said data input/output request when said upper limit  
4       value has been exceeded.

7 and 8.       (Canceled)

1               9. (Currently amended): An accounting system according to Claim [[7]]4,  
2 wherein at least one of said accounting server and said service processor has means for fetching  
3 said accounting data of said storage control device every predetermined period, and means for  
4 calculating rates on the basis of said accounting data fetched by said fetching means and for  
5 performing rate management.

1               10. (Previously presented): An accounting system according to Claim 1,  
2 wherein a connection between said storage control device and said host computers is made  
3 through serial channels of optical fibers so as to constitute a LAN.

1               11. (Previously presented): An accounting system according to Claim 4,  
2 wherein said storage control device has I/O control portions for setting at least said upper limit  
3 values and generating accounting data in accordance with said upper limit values, and a shared  
4 memory for storing said accounting data.

1               12. (Currently amended): An accounting method for making accounting for  
2 operation of a plurality of host computers in a storage-related accounting system which  
3 comprises said plurality of host computers, an accounting server, a storage control device  
4 connected at least to said plurality of host computers and to said accounting server for  
5 performing data input/output operation through channel ports, and a storage device for storing  
6 data processed by said storage control device, said accounting method comprising steps of:

- 7               (a) designating accounting subject control units;
- 8               (b) for at least some of said accounting subject control units, determining an upper  
9 limit value for a number of times of access per unit of time and for an upper limit value for a data  
10 transfer quantity per unit of time, wherein access and data transfer occur for each of said  
11 accounting subject control units;
- 12              (c) generating accounting data of said accounting subject control units in  
13 accordance with said upper limit values; and
- 14              (d) recording said accounting data,

15               wherein for each said accounting subject control unit, accounting data is  
16   generated using metered accounting if an upper limit value for either the number of accesses per  
17   unit of time or for the quantity of data transferred per unit of time is not set, ~~or fixed accounting,~~  
18   ~~depending on whether an upper limit is defined in said accounting subject control unit for either~~  
19   ~~a number of accesses per unit time or a quantity of data transferred per unit of time~~

20               wherein for each said accounting subject control unit, if said upper limit value is  
21   set, then accounting data is generated using fixed accounting when said upper limit value has not  
22   been exceeded,

23               wherein for each said accounting subject control unit, if said upper limit value is  
24   set and an access limit for the number of accesses is not set, then accounting data is generated  
25   using metered accounting when that upper limit value has been exceeded,

26               wherein for each said accounting subject control unit, if said upper limit value is  
27   set and said access limit is set, then accounting data is generated using fixed accounting.

1               13. (Previously presented): An accounting method according to Claim 12,  
2   wherein each said accounting subject control units is a host computers, a World Wide Names, a  
3   channel ports, or a storage areas in a storage devices.

1               14. (Original): An accounting method according to Claim 12, wherein said  
2   accounting server is associated with a service processor for controlling and supervising said  
3   storage control device.

1               15. (Original): An accounting method according to Claim 12, wherein, in said  
2   step (b), said accounting server makes an upper limit values setting request to said storage  
3   control device, and in response to said request, said storage control device determines said upper  
4   limit values for said number of times of access and said data transfer quantities.

1               16. (Original): An accounting method according to Claim 12, wherein said  
2   generation of said accounting data stated in said step (c) is made by said storage control device in  
3   accordance with said upper limit values.

1               17. (Original): An accounting method according to Claim 12, wherein, in said  
2 step (d), said accounting server makes an accounting data sending request to said storage control  
3 device in every predetermined period, and receives said accounting data in said every  
4 predetermined period to record said accounting data in a database of said accounting server.

1               18. (New): The method of claim 1 wherein said upper limit value is for the  
2 number of accesses per unit of time or for the quantity of data transferred per unit of time of  
3 every connected server.

1               19. (New): The method of claim 1 wherein said upper limit value is for the  
2 number of accesses per unit of time or for the quantity of data transferred per unit of time of  
3 every connected world wide name.

1               20. (New): The method of claim 1 wherein said upper limit value is for the  
2 number of accesses per unit of time or for the quantity of data transferred per unit of time of  
3 every connected channel port.

1               21. (New): The method of claim 1 wherein said upper limit value is for the  
2 number of accesses per unit of time or for the quantity of data transferred per unit of time of  
3 every connected storage device.

1               22. (New): The method of claim 1 wherein said upper limit value is for the  
2 number of accesses per unit of time or for the quantity of data transferred per unit of time of  
3 every connected in-storage-device area.

1               23. (New): The method of claim 12 wherein said upper limit value is for the  
2 number of accesses per unit of time or for the quantity of data transferred per unit of time of  
3 every connected server.

1               24. (New): The method of claim 12 wherein said upper limit value is for the  
2 number of accesses per unit of time or for the quantity of data transferred per unit of time of  
3 every connected world wide name.

1               25. (New): The method of claim 12 wherein said upper limit value is for the  
2 number of accesses per unit of time or for the quantity of data transferred per unit of time of  
3 every connected channel port.

1               26. (New): The method of claim 12 wherein said upper limit value is for the  
2 number of accesses per unit of time or for the quantity of data transferred per unit of time of  
3 every connected storage device.

1               27. (New): The method of claim 12 wherein said upper limit value is for the  
2 number of accesses per unit of time or for the quantity of data transferred per unit of time of  
3 every connected in-storage-device area.